

ABSTRACT

METHOD FOR OPERATING A CMOS IMAGE SENSOR

The present invention concerns a method for operating a CMOS image sensor including a matrix of pixels (50) arranged in a plurality of lines and columns, each of said pixels including a photosensor element (PD) accumulating charge carriers in proportion to the illumination thereof and storage means (C1,55) able to be coupled to
5 said photosensor element (PD) at a determined instant in order to generate a sampled signal representative of said charge carriers accumulated by the photosensor, the storage means (C1, 55) being intended to assure storage for the purpose of reading said sampling signal.

According to the present invention, when said sampled signal, stored across
10 said storage means is read, the photosensor element is held at a voltage such that any charge carrier generated by the latter is drained and thus does not disturb the sampled signal stored on the storage means.

According to the present invention, the problem of diffusion of charge carriers typically encountered with such sensors when they are operated in accordance with
15 conventional techniques is thus answered. This method allows, in particular, use of such a sensor for applications where the exposure time of an image is a determining factor because it is very short.

Figure 3